

VII. NEXT STEPS

The Commission recently completed a Strategic Plan for 2012-2018 and identified many action items that the Commission staff or partner organizations plan to take to address the challenges of sea-level rise and climate change. The first priority in the Plan is to for the Commission to adopt sea-level rise policy guidance for use in LCP planning and project design (3.1.1), and this draft guidance reflects significant progress toward accomplishing this task.

The objectives and action items from the Strategic Plan related to sea-level rise and climate change are listed below, followed by additional items that staff identified as next steps during the completion of this guidance document. These next steps are intended for the Commission staff to complete over the next two to five years, in coordination with other relevant partners and research institutions, as staff capacity and funding allows.

STRATEGIC PLAN EXCERPTS: ACTIONS RELATED TO SEA-LEVEL RISE AND CLIMATE CHANGE

GOAL 1: Maximize Public Access and Recreation

Objective 1.1 – Enhance Public Access through Updated Beach Access Assessment and Constraints Analysis

Actions:

- 1.1.5 Identify locations where access may be limited or eliminated in the future due to sea-level rise and increased storm events and begin planning for other options such as new vertical accessways to maintain maximum beach access (see also Action 3.2.1).

Objective 1.4 – Expand the California Coastal Trail System through Enhanced Planning and Implementation

Actions:

- 1.4.4 Identify locations of the CCT that might be at risk from rising sea level and increased storm events and begin planning for trail relocations or other alternatives to insure continued functionality of the CCT (see also Action 3.2.1).

GOAL 3: Address Climate Change through LCP Planning, Coastal Permitting, Inter-Agency Collaboration, and Public Education

Objective 3.1 – Develop Planning and Permitting Policy Guidance for Addressing the Effects of Climate Change on Coastal Resources

Actions:

- 3.1.2 Adopt general sea-level rise (SLR) policy guidance for use in coastal permitting and LCP planning and amendments based on best available science, including the final report from the Natural Research Council of the National Academy of Science entitled, *Sea-Level Rise for the Coasts of California, Oregon, and Washington* (released June 2012)

- 3.1.3 Based on the general SLR policy guidance, identify and develop specific regulatory guidance for addressing coastal hazards, including recommendations for analytic methods for accounting for SLR and increased storm events in project analysis, standards for redevelopment and development in hazard zones (e.g. bluff top and flood zones), buffers for coastal wetlands, and policies for shoreline structure design and impact mitigation.
- 3.1.4 Develop work program to produce policy guidance for coastal permitting and LCPs to account for other climate change related impacts and adaptation planning including wetland, marine and terrestrial habitat protection, habitat migration, risk of wildfires, water supply and groundwater protection, etc.
- 3.1.5 Provide public information and guidance through workshops, presentations to local government, etc. Assist local governments with interpretation of scientific or other technical information related to climate change and sea level rise that could be of use in adaptation planning.
- 3.1.6 Contribute to relevant state-wide efforts on climate change and adaptation as a member of the State's Climate Action Team – Coast and Ocean Working Group.
- 3.1.7 Coordinate with Natural Resources Agency, Office of Planning and Research, California Emergency Management Agency and others to provide consistent guidance on climate change in updating general plans, hazard mitigation plans and other planning documents used by local governments
- 3.1.8 Coordinate with the State Lands Commission to address sea level rise and shoreline change and implications for the management of public trust resources.

Objective 3.2 – Assess Coastal Resource Vulnerabilities to Guide Development of Priority Coastal Adaptation Planning Strategies

Actions:

- 3.2.1 Conduct a broad vulnerability assessment of urban and rural areas to identify priority areas for adaptation planning, such as community development, public infrastructure, public accessways, open space or public beaches at risk from sea level rise. Identify and participate in on-going vulnerability assessments and adaptation planning efforts as feasible.
- 3.2.2 Work with Caltrans and other public agency partners to assess and address roadway, rail, and other transportation infrastructure vulnerabilities, particularly along Highway One and other coastal roads and highways.
- 3.2.3 Work with the Department of Water Resources, SWRCB and local agencies to assess and address water and wastewater treatment plant vulnerabilities along the coast.

- 3.2.4 Work with the Conservancy, CDFG, US Fish and Wildlife (USFWS) and other partners to assess the vulnerability of wetlands and other sensitive habitat areas. Identify habitats that are particularly vulnerable climate change and/or habitats that may be important for future habitat migration (e.g. wetland transitional areas).
- 3.2.5 Work with the Coastal Observing Systems, researchers, and others to identify and develop baseline monitoring elements to better understand and monitor changes in coastal conditions related to sea level rise and other climate change impacts.
- 3.2.6 With the Conservancy and OPC, develop and implement a competitive grant program to provide funding to selected local governments to conduct vulnerability assessments and/or technical studies that can be used to assess a community's risks from climate change and inform updates to LCPs.

Additional Items:

- **Continue an active program of public information on sea-level rise.** The Commission will strive to provide public information about sea-level rise issues through public workshops, the Commission's web site, meetings, outreach and our public education program.
- **Develop methods for quantifying impacts to coastal resources from shoreline armoring projects.** The Coastal Commission staff has initiated a Project of Special Merit to build upon the Commission's existing efforts to mitigate for the adverse impacts of shoreline development projects to public access and recreation by working with beach ecologists and a valuation economist to develop a method to quantify impacts to biological resources and beach ecology. The final product will be a complete a set of guidelines to use in assessing the impacts of proposed shoreline armoring projects and a method(s) for calculating the full value of recreational and ecological loss resulting from installation of shoreline armoring projects (where they may be approved as consistent with the Coastal Act).
- **Consider producing additional guidance documents, including:**
 - Broader climate change guidance addressing other climate change impacts to the coastal zone.
 - Guidance on managed retreat of critical infrastructure, including when to consider managed retreat rather than continue with repairs and maintenance in light of sea-level rise.
 - One-page fact sheets on some adaptation measures such as green infrastructure, conservation easements, etc.

- Guidance on the use of ‘living shorelines’ for California, including an assessment of areas or coastal situations where they could be effective, what they need to succeed, monitoring requirements, and maintenance, etc.

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